

Duxbury's Roads And Highways

By THE REV. ROBERT MERRY

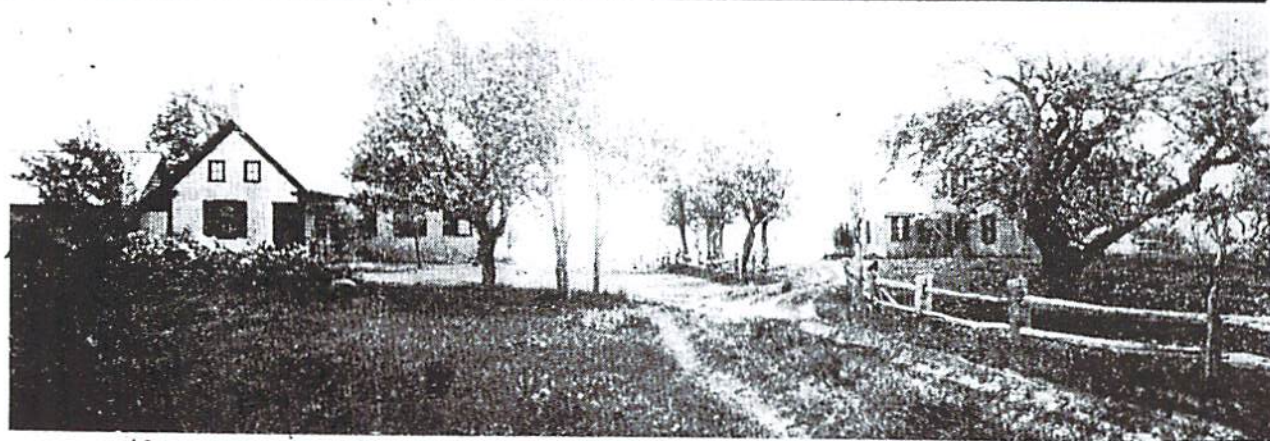
"It was my weather service," explained Paul Brogna as he returned from answering the phone in the hall outside his office. Paul is engineering assistant to the board of selectmen in charge of street and highway maintenance. I thought an hour's interview with him would be the best place to start on a story about Duxbury's roads, especially now in the dead of winter when frost and snow are high on the list of problems.

"They say it's going to be snow," he continued, "only an inch or two but we'll probably have to alert the sand trucks. We'll start them as soon as the snow begins to fall. Sometimes we wait until the plowing has been finished; it all depends on the kind of snow we are dealing with, and every single storm is different. Each is a separate challenge.

"We have 8 trucks in our highway department and 9 full-time men, and in a storm the Department of Lands and Resources lends us one. Then we have 20 local contractors whom we turn out in a major storm, i.e., one that gives us over 3 inches. We start moving with 3 inches, and with this kind of help, we fan out first over the primary roads, then hit the secondary." (He drew my attention to a town street map on the wall with various colors marking critical street locations.) "The entire road system of 130 miles we clear normally in a matter of 3 or 4 hours."

With these words Mr. Brogna had cleared up what had been a mystery to me ever since I'd returned to my native Duxbury in retirement, namely, "how is the highway department organized so they can do such a tough job so quickly and effectively?" Another question plagued me and simple though it was I thought I'd ask:

"Paul," I said, "Tell me if you can why the sanders always climb **up** the hill by my house on Bay View Rd. to sand, instead of driving **down** the hill? With that many ton load isn't this a great waste of gasoline?"



About 1850, an old Duxbury road to the bay with George McLaughlin's house on the left, Lester Bates' house on the right.

Paul smiled an indulgent smile. He explained the answer is in 2 parts: first, if the road is slippery when the sanding is done and the truck slides back, it has a sanded surface on which it can get a new grip. Second, when the truck is traveling uphill gravity pulls the sand to the rear of the vehicle, allowing the sand to flow more freely into the spreader.

He revealed to me several more "inside secrets" about the operation of the highway department in winter. One is the fact that Duxbury weather is sandwiched in between that of the Boston area and the Cape, and frequently has third weather experiences all its own. Plus the fact that tides and moon phases affect storms, often bringing in or carrying out to sea storms that had not been predicted by the weather bureau. There were many other special angles to his task that Paul mentioned, but a significant one he did not have to mention was the annual highway disaster known as "mud-time" which dogged the department for many years.

This was the result of the rising of the frost out of the ground, turning all streets not specially constructed into gigantic mud pies. I remember well for example driving my father's 1919 Dodge (in 1923) through a sea of mud up to the hub caps from the Ashdod Fire Station down to Temple St. This year with the frost level approaching a depth of 4½ feet would have been a real obstacle to travel had it not been for new methods of road construction and new road-building materials perfected over the years. Perhaps I can defer a report on this to a later paragraph -- a story itself -- for the evolution of Duxbury's roads demands first a bit of history. And naturally I turn to Dorothy Wentworth's **Settlement and Growth of Duxbury**.

"Long before the white man came to Duxbury, there were Indian trails and animal trails going in so many directions that the settlers had no need to hack out paths of their own... From the arrival of the first settlers until the 18th century Duxbury was criss crossed with innumerable paths used as highways. These led to outlying farms, wood lots, marshes and ponds, to the shore and between travelled highways... Many of the present roads follow those of the early settlers... Along the shore the streets at right angles to the shore are often rights of way that ran from Duxbury Path or Tremont St. to the water. The streets parallel to the shore are newer and laid out as streets. For example there was no way along Kingston Bay until 1834 when Border St. (now Bay Rd.) was laid out, and no Washington St. until 1798 which for a while was called Main St."

With the central location of the Meeting House adjacent to the Old Burial Ground on Chestnut St. in early times, it was only natural that roads would branch out from there. But as early as 1623 a highway began at Jones River "Wading Place," a ford near the present railroad bridge in Kingston and carried on west of what is now Tremont St. Another early trail-highway was what was called the Bay Path, King's Highway, or Old Massachusetts Path, also beginning at the "Wading Place" and continuing finally on to Boston after a stop at the large Elm tree which came to be known as the "Tree of Knowledge" to pick up the Duxbury mailbag. (A stone tablet has been erected recently by the

Tercentenary Committee to commemorate this tree.)

These roads were generally no more than wheel tracks on top of the ground, and while laid out and staked by surveyors to be reserved for public use they enjoyed none of the kind of grading, ditching and surfacing we use today. It was Telford and MacAdams in England in response to a parliamentary request that "something be done about roads" who first made efforts in the early 1800s in the direction of modern road building. MacAdam was the first to recommend the "crown" road, with ditches on both sides for drainage and hence freedom from frost damage. It was this kind of road that Duxbury featured at the turn of the 19th and 20th centuries. The town was divided into 12 highway districts each with a foreman at the head. Town reports list 288 men who worked on these gravel roads at this time repairing weather damage and that of iron-shod horses and heavy wagon wheels. Cash credits for labor done are also listed, as much of this income was used by citizens to defray tax bills.

Researching town reports reveals parallel information that should be noted in this connection, especially the budget rivalry between the school and highway departments, with highways generally winning. As a former school teacher I wondered about the impact of this on school authorities and read several annual superintendent reports looking for protest. Sure enough in the annual report of 1905 Superintendent Edgar Willard deplored the enthusiasm with which town meeting endorsed the budget for highways of \$10,000 (actually it was \$5,000) and reluctantly passed half that for schools! But gravel road maintenance was that costly.

The town records in 1900 the purchase of several tons of crushed stone to mix with the clay and rolled by an iron roller to form a tough road surface. We read that in 1873 such a roller was purchased, pulled by a team of horses. This was replaced in 1913 by a steam roller and this in turn in 1924 by a gasoline engine powered roller. By this time what we call "McAdamized" pavement (a combination of crushed stone and tar) was in general use. Massachusetts and Ohio were the first states to make use of this new kind of highway surface. Simple tar covering and asphalt came later, and then concrete, and now these surfaces vary in use depending on climatic conditions.

Reading between the lines in town reports and recalling my own teen year experiences I saw many continuing battles over road maintenance and construction. A chief one involved my father and his "dying loyalty to the horse. He resented deeply the silent but certain takeover of town transportation by the automobile. Father felt the horse would win out in the end since he did not need the motivation of a fuel brought from far away but could make do in a pinch with a cropping of the front lawn. As pavement grew harder, horses' ankles grew weaker, for little provision was made for them in the format of a soft shoulder for example. Again, motor driven plows scooped all the snow off the streets and left little or none for sleighs and sleds to slide over.

Then too, the automobile brought problems of its own. One was the necessity of straightening out roads and widening corners which had served quite satisfactorily for a horse trotting along 8 to 12 miles an hour, but would not do at all for an auto at 45. Hence the town's purchases of private land acquired by eminent domain for this purpose. The last recorded instance of such acquirement was the gift in 1958 of 6 feet of property from Dr. Edwin P. Leonard to ease access to Sweetser's store. There were various fears, too, about the effect of "power-driven wheels," as it was thought that their rotation was inimical to the road surface. I remember well signs that appeared all over town at the foot of hills (and I think particularly of one below our house above Blue Fish River) that read **Do Not Use Cut-Out On This Hill** per order selectmen (a cut-out was a gadget attached to the exhaust pipe in front of the muffler to increase the breathing capacity of the engine and hence give it great power, it also frightened the horses by its shot-gun sound.) Looking back there were so relatively few automobiles compared to the present day one wonders at the alarm they sounded for our municipal leaders. Roadways had not been that crucial a matter. People laid out roads as they were needed, and when the need ceased, so did the road. I recall an excellent road that began at Mayflower St. just opposite the end of Island Creek Pond and climbed over several hills paralleling Malachy's Brook and ending at our farm on North Hill. Now it is completely overgrown

with trees 50 feet high standing in its midst. Mrs. Wentworth cites other instances of abandoned roads. And as with the multiplicity of the roads, so with names.

Street names came and went except for the primary roads. They furnished a volume of research all their own, and it is almost impossible to document them. So it is with fear and trembling I submit the following: It was noted that Washington St. was first called Main St. and Bay Road Border Rd. Marshall St. used to be Columbus Ave., King Caesar Rd. till relatively recently was Bayside Ave. Streets were named for their destination (hence Depot St., So. Station St. and Railroad Ave.) or for owners of land bordering the street (Alden St., Soule Ave., Church St.) Duxbury has 2 patriotic streets (Franklin and Washington) and 2 "memorial streets" -- St. George St., named after the son of Duxbury's chief benefactors at the time, the William J. Wrights, who met an untimely death falling down an elevator shaft, and Harrison St., named for the President who died one month after taking his inaugural oath. Surplus St. used to be Poverty Lane because it led to the Poorhouse. Two streets were

named from their shape, Crescent (on the west side of Captain's Hill) and Bow in Millbrook. I have always wondered why East St. goes south of West St.?

A confusing factor of Duxbury's street names is often their similarity, even though they are located far apart. For example, Mayflower St., Ave., Place, Court, etc. or the various Priscilla's -- Priscilla Ave., lane, road, etc., but the most bewildering is the various "Pines." How would you like to be an ambulance driver on emergency call to one of the following: Pine Hill Lane, Pine Brook Lane, Pine Hill Ave., Pine Point Place, Pine Point Rd., Pine Ridge Lane, Pine St., Pinewood Lane or Rustling Pine Lane (shouldn't that be "Whispering -- I never realized pine needles could "rustle"). But we love these names; they belong somehow to a country town, and there is now a screening process for future names. They are first submitted to the town historian, Dorothy Wentworth, then approved by the selectmen. Perhaps we are on the way to clarifying the situation.

And so what of the future of Duxbury's roads and highways? Can we afford to keep them up to safety requirements in this day of "living with less?" This question must plague us as we face the end of our fossil fuels. Perhaps a quick glance back may help us.

In earliest times as colonial records show, land was parcelled out to give subsistence and security to every family. Up to the turn of this century this subsistence was pretty much the style of life in the countryside. Then came the period beginning after the Civil War when family necessities were grown (and later manufactured) and brought to central locations for peddlers to carry around to the homes. A modicum of subsistence still was grown and cut by families, but grocer men and meat men and fish men, etc., roamed the landscape with supplies to sell to people. The few surviving milkmen are the last remnants of this age. And it was indeed a great day when you could ring up the clerk at Sweetser's or indeed at SS Pierce's (pronounced "purses") in Boston on a morning and have your order delivered that afternoon. One good result of this was the limitation of traffic to mostly vehicles "on business." Indeed, at first "pleasure cars" as they were called were reserved for Sundays and were a distinctive style, and not in general everyday use.

Now, however, almost everyone has his own car, and often several and the streets and highways throb

with their sound. All society is alive with cars, moving like ants in an anthill -- and everyone drives to the corner shopping center to supply himself with what have become the "necessities" of life. It is a vast enterprise and this is not the place to praise or condemn it. One solid fact does emerge however, and that is that despite all our efforts to cut back on our affluence, it is clear as crystal that we cannot change materially this arrangement of the distribution of goods and services without a massive cascade of dislocation.

In a word: our roads and highways are a vital necessity for our lifestyle. We are right to support the highway budget. It is not an option to go back to self-subsistence; we need our highways. They are part of us. It is impossible to see how we could survive even on a minimal basis if they were to be cut back substantially. A case in point is the current issue of the "National Geographic" magazine devoted exclusively this month to the problem of energy, spends a great deal of time on the automobile and its costs in terms of fossil fuels, etc., and the fact that it is the object of a permanent love affair with the American people; no space whatsoever is given to a consideration of its elimination. It is presumably here to stay as part of our "given agenda." And with the automobile that essential equipment for its use, an adequate and safe highway system.

The snow has come, an inch more than the weather service predicted, and in my imagination I look out and watch the sand truck come up the hill, shifting into low gear opposite Barbara Kelley's house and by great effort struggling on until it comes to an almost complete stop opposite the Bourget's driveway and with a great clashing of gears and moaning and groaning it shifts into low low, and proceeds on past the corner and I feel for it as it climbs under that heavy load. I suppose Paul is right -- it's the most practical way to do this sanding job, -- but my energy-conscious soul wonders still if it wouldn't save a lot more gasoline if it went down the hill instead.